SB Animal Behavior

**Professors:** Dr. Wan-chun Liu liuw@mail.rockefeller.edu

**Office:** TBA

**Office hours:** Wednesday & Friday 11:40-12:30

**Course Description**

This semester Animal Behavior course is designed to provide a broad understanding of the basic principles of Animal Behavior. This course covers the major topics in animal behavior but focus particularly on the interaction between genes and environment. Students study animal behavior topics using scientific method and logical reasoning. Students also have to conduct an independent project to observe animal behavior, come up with hypothesis and experimental designs. Students are strongly encouraged to be participated in class discussion, which may help students to better understand the class materials. This course will use a combination of studies in neural or molecular mechanism, development, and evolutionary and ecological adaptation.

**Course Materials**

**Textbook:**

Principles of Animal Behavior: by Lee Alan Dugatkin.

**On-line source:**

Lecture notes, answer keys for homework, quizzes, and exams, and other supplemental readings will be posted on the instructor’s website (Wikispace).

* Coming up soon.

**Grading**

Attendance 5 pts

Homework 10 pts

Reading Quizzes 10 pts

Quizzes 15 pts

Midterm Exams 20 pts

Cumulative Final Exam 20 pts

Project 20 pts

(first report: 5 pts, final report: 10 pts, presentation: 5 pts)

Course grades will not be scaled or curved. To fulfill the course requirement, you are expected to participate in classroom discussion when appropriate, and respect your peers.

**Homework:**

Each student must complete his/her own homework. **Do not plagiarize**. Some exam questions may be fairly similar to homework questions, so students are encouraged to fully understand and carefully review homework assignments. ***Late homework assignments will only be accepted due to an excused absence.***

**Quizzes and Exams:**

All quizzes and exams are closed book. Absences from school on the day of the exams due to illness must be excused with a doctor’s note in order to qualify for a make-up exam. Students with pre-arranged activities (athletic competitions, family trips, etc.) will have to bring in the proper documents in advance and take the exam on a date prior to their peers.

**Project report:**

Each student will complete a minimum 5-page research report and term paper and present his/her study to the class using visual aids at the end of the semester. Specific instruction on term paper will be given separately.

**Class attendance:**

Because of the intensity of this course, missing a day of class is detrimental to a student’s understanding of this class materials. We strongly discourage students from missing class. If a student does miss class it is his/her responsibility to check in with his/her classmates and the instructor’s website to make up the lecture and assignment. Students are expected to be in class ON TIME. Tardiness interrupts the lecture flow and affects others’ rights to learn.

**ACADEMIC HONESTY**

Cheating or academic dishonesty in any form will not be tolerated. Students who cheat on a quiz, an exam, or copy an assignment from others will automatically receive a zero. After the first offense a meeting will be called with the student, parent/guardian, teacher, advisor, and guidance counselor. The second offense will result in automatic failure of this course.

# **Topics covered in this course:**

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| Proximate and Ultimate causes of behavior |
| Innate and learning behavior |
| Habitat selection |
| Migration/ navigation |
| Foraging behavior |
| Anti-predator behavior |
| Communication  Sexual selection |
| Mating system  Parental care |
| Social behavior  Animal cognition |
| Human behavior |
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**Feedback and availability**

Students should feel free to ask instructor questions either in person in class or outside of class, or through email. Students are strongly encouraged to attend office hours and Study Groups to ask questions, discuss the homework problems, and talk about biology in general. We also welcome parents/guardians to contact us regarding their students’ performance in class through email.